AMENDMENTS
TO
THE WATER QUALITY CONTROL PLAN FOR THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS

FOR

THE CONTROL OF ORCHARD PESTICIDE RUNOFF AND DIAZINON RUNOFF INTO THE SACRAMENTO AND FEATHER RIVERS

RESPONSE TO PUBLIC COMMENTS ON 29 AUGUST 2003 STAFF REPORT

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Response to Public Comments on 29 August 2003 Staff Report

The following provides staff's response to comments on "Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers"; Draft Final Staff Report; 29 August 2003. A summary of the comment and recommendation is provided followed by the staff response.

1. Dr. David Sedlak, Associate Professor, University of California, Berkeley

[Note – Dr. Sedlak provided supplemental scientific peer review of a variation in the general approach used to establish Load Allocations and Margin of Safety for the Sacramento River between Verona and I Street. The page references are to the document, *Supplemental Peer Review of Basin Plan Amendment for the Control of Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers* 15 September 2003, which included revisions to Section 5.5 of the Staff Report.]

Comment 1: I have read the report and believe that I understand the approach that you have recommended for setting the loading capacity and margin of safety between Verona and I Street. I believe that the method is valid and appropriate given the constraints of the TMDL process.

Response to Comment 1: Regional Board staff appreciates the comment.

Comment 2: *On page 6, you state: "The Sacramento River at Verona is the Sacramento River at the United States Geological Survey gauging station at Verona (Station Number 11425500). The Sacramento River at Verona site was chosen as one of the sites for calculating Loading Capacity since there is an existing gauging station and extensive historic flow record; the site is just downstream of three major tributaries containing significant orchard runoff (the Colusa Basin Drain; Sutter/Butte; and Feather River subwatersheds); and <u>no significant orchard runoff enters the Sacramento River below this site.</u>" (I added the underline here.)*
If there is no significant orchard runoff in this reach, why does it get an allocation at all? I think it would be helpful if you could explain why it is necessary to go through the allocation exercise for this reach. If it's solely to have the two compliance points it should be stated as such. If it's to account for future land use that could result in a discharge unrelated to urban runoff this should be stated as well. Otherwise, the seemingly contradictory statements could confuse the reader.

Response to Comment 2: Additional discussion has been added to the staff report as suggested. If the reach did not include allocations, that reach would still be on the 303(d) list and require a TMDL. This reach is currently listed because impairments have occurred there.

Comment 3: *You go on to state (p. 14) "An explicit margin of safety of 30% is applied to the available load allocation between the Sacramento River at Verona and the Sacramento River at I Street. This margin of safety accounts for the runoff from*

urban land areas into this reach of the Sacramento River. The urban land areas generally fall under NPDES permits and are subject to the waste load allocations, which are equivalent to the diazinon water quality objectives. This margin of safety assumes a worst-case condition in which diazinon concentrations in the urban runoff is equivalent to the waste load allocation, and, therefore, do not provide any additional assimilative capacity."

If urban land runoff is subject to NPDES permits, won't it be covered under the waste load allocation? If so, how can you justify taking this out of the load allocation in the form of a margin of safety? Aren't you subtracting this load twice?

Response to Comment 3: Additional explanation has been proposed for the staff report ((see Attachment B to LATE REVISIONS – 16 OCTOBER 2003 HEARING; 7 OCTOBER 2003 VERSION). The waste load allocation has already been assigned to the NDPES sources as equal to the water quality objectives. The load allocation is the remaining loading capacity available when the waste load allocation is taken into account. It is estimated that under certain flow conditions, urban runoff can make up nearly 30% of the flow gain[1] in the Sacramento River, Verona to I Street reach. The remaining 70% of the flow gain is available to assimilate load from non-point sources. The 30% margin of safety is based on the worst-case estimate of urban runoff accounting for 30% of that flow gain. The margin of safety is not subtracted from the waste load allocation, but only from the loading capacity to determine the load allocation, which applies to non-point sources.

Comment 4: *Finally, you state (p. 13): "The final load allocations are shown to two significant figures, which is consistent with how diazinon lab results below 1 μg/L are reported."* I am not entirely comfortable with the connection between the way the lab reports data and the significant figures used on for a load allocation. I believe that you should set this based upon uncertainties inherent in the allocation process and not lab reporting customs. If the laboratory were to change the way in which it reports the data I wouldn't want someone to infer that the allocation process would be modified.

Response to Comment 4: Regional Board staff agrees that the significant figures reported in lab analysis should not generally serve as the sole basis for determining the number of significant figures for the load allocations. Staff believes that, in this case, establishing the load allocation factors to two significant figures is appropriate (e.g. 12% for the Feather River, 17% for the Colusa Basin Drain, etc). Even the most precise lab methods available (e.g. those used by the U.S. Geological Survey) only report diazinon concentrations to two significant figures. Calculating load allocations with greater precision than can be determined from the measured concentration would not be appropriate. If lab analytical methods become more precise and report results to more significant figures, the load allocation factors could be amended to reflect that greater

[1] The focus of the loading capacity calculation for the Sacramento River, Verona to I Street reach, is on the increase in flow or "flow gain". Recall that the loading capacity for the Sacramento River at Verona has already been allocated, so any additional diazinon load can only be discharged if the flow in the Verona to I Street reach increases.

precision. Such an amendment would only be needed if greater precision in allocations were necessary or appropriate to ensure compliance with the water quality objectives.

2. Douglas Y. Okumura, Assistant Director; Division of Pest Management, Environmental Monitoring, Enforcement, and Licensing; Department of Pesticide Regulation

Comment 1: Prohibition of Discharge (Staff Report, page 18)
As proposed, this provision includes some inconsistencies related to compliance criteria for the water quality objective, specifically:

a. *The term "previous year."* This means that the schedule to attain water quality objectives is four years (through the 2007 winter runoff period) instead of the five years as stated in the staff report (page 70).

Recommendation: Amend the text so that it is in agreement with element 3 of the "Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers."

Response to Comment 1a: The Regional Board expects that all dischargers of diazinon, in order to discharge, will either seek to participate in a waiver of waste discharge requirements program or a waste discharge requirement (WDR) program. The prohibition is designed to ensure that all dischargers of diazinon are regulated either under a waiver or WDR program when compliance is required with the diazinon water quality objectives and allocations (i.e. by June 30, 2008). If unregulated discharge has contributed to an exceedance of diazinon objectives or allocations the year prior to the compliance date, the prohibition imposes a regulatory control on the unregulated discharges. This will allow the Regional Board to take any necessary action after the compliance date to control diazinon discharges through the prohibition or an applicable waiver or waste discharge requirement. Additional text discussing this point is proposed for the Staff Report. The "previous year" has been clarified to mean a July to June year (i.e. starting July 1 of one calendar year and ending June 30 of the next calendar year).

b. *The term "any exceedence."* Currently, the Regional Board is apparently not provided with any flexibility when determining compliance with numeric water quality objectives.

Recommendation: Amend this provision and the Basin Plan's Policy for Application of Water Quality Objectives so that the Regional Board has flexibility when compelling evidence suggests that the prohibition of discharge is unwarranted.

Response to Comment 1b: See Response to Comment 1a. The prohibition is meant to be the regulatory mechanism of last resort for discharges of diazinon that are not regulated under a waiver or WDR program. Therefore, the prohibition is not designed to provide flexibility, but is meant to provide an incentive for dischargers to participate in an applicable waiver or WDR program and, absent such participation, to provide the Regional Board with an additional enforcement tool to ensure compliance with water quality objectives and the TMDL. Since the waiver or WDR program will likely involve

the collection and reporting of data and information to the Regional Board, the Regional Board will be able to exercise the flexibility mentioned by the Commenter through those programs. Such flexibility would be difficult under the prohibition, since the Regional Board would not have an effective means of gathering and evaluating the necessary information from a discharger not under a waiver or WDR.

c. *Time frame for compliance with water quality objectives*. The specific pesticide objective for diazinon, as presented in Table III-2A, is the maximum concentration, its averaging period, and the allowable frequency of exceedences. In this case, the allowable frequency is not more than once every three years on average. Strictly interpreted, if the diazinon objective is to be met by June 30, 2008, as stated in element 3 of the "Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers," diazinon concentrations in the Sacramento and Feather Rivers must be maintained below the maximum allowable concentrations during two of the three years between July 1, 2005, and June 30, 2008, inclusive.

Recommendation: Amend the text so that it clearly states the Regional Board's intent for a compliance schedule.

Response to Comment 1c: The compliance date is June 30, 2008. Compliance with the diazinon water quality objectives and allocations after that date will be evaluated based on data collected after June 30, 2008. The prohibition will apply if there is an exceedance of the water quality objectives or allocations in the year prior to the compliance date (e.g. July 2007-June 2008).

d. *Regulatory consequences of exceeding load allocations*. The primary goal of the orchard pesticide runoff program and the diazinon runoff control program, as stated in the "Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers," should be to "ensure compliance with diazinon water quality objectives in the Sacramento and Feather Rivers . . . ." Load allocations should not have equal regulatory stature. The Regional Board should use water quality objectives as the primary means for determining protection of beneficial uses. In the event that objectives are violated, load allocations provide additional regulatory tools to help identify specific watersheds where additional action may be warranted.

Recommendation: The text should be amended to reinforce the concept that the overall goal is attainment of water quality objectives and that load allocations may be used to refine responses to violations of objectives.

Response to Comment 1d: See response to Comments 1a and 1b. Dischargers regulated under a waiver or WDR will be reporting to the Regional Board on their activities to control diazinon discharges and meet the applicable load allocations. Load allocations are designed to prevent exceedances of water quality objectives. Therefore, it is important that load allocations be met. If the load allocations are not met, the Regional Board will have an efficient mechanism to work with dischargers to take any necessary actions. The prohibition should apply if the load allocations are not met to

ensure that unregulated discharges of diazinon do not contribute to exceedances of the load allocations.

e. *Measuring exceedences of load allocations*. Recommendation: Amend the text to make it clear that when water quality objectives in the Sacramento and Feather Rivers are violated, only watersheds that violate their load allocation are subject to a prohibition of discharge or other regulatory action.

Response to Comment 1e: The prohibition language has been changed to clarify the application of the prohibition to those areas potentially contributing to the exceedance of the water quality objective or allocations.

Comment 2: Implementation Plan, element 1.a. (Staff Report, page 19)
In this context, the word "necessary" may be construed to be synonymous with "required."
Recommendation: Replace "necessary" with "appropriate."

Response to Comment 2: The word "necessary" conveys the intended degree of weight that dischargers should give to choosing management practices to comply with the water quality objectives.

Comment 3: Implementation Plan, element 2. (Staff Report, page 19)
The implementation plan does not indicate how compliance with this provision will be assured. By what criteria will an orchard discharger determine whether a pesticide is a potential ground water or surface water contaminant? How will the Regional Board know if orchard dischargers conscientiously made the considerations required by this element?
Recommendation: Specify the responsibilities of orchard dischargers to implement this element or delete. Proposed additions to the Monitoring and Surveillance chapter (staff report, page 23) provide for monitoring surface waters for potential contamination by diazinon alternatives.

Response to Comment 3: As described in the Basin Plan Amendment, any waiver or WDR must be consistent with the policies in the implementation program. The orchard dischargers will be able to demonstrate their compliance with element 2 through the information they submit as part of the waiver or WDR program. No specific criteria are established for the dischargers to make their determination of potential for water quality degradation, since such a determination will be based on the characteristics of their discharge and of the receiving water, which is not known to the Regional Board. One option for dischargers would be to review the information on the pesticide label to determine whether there is a potential ground or surface water problem.

Comment 4: Implementation Plan, element 3. (Staff Report, page 19)
See Comment 1, ~~fifth~~ third[2] bullet.

[2] Joe Karkoski of the Regional Board contacted Marshall Lee of DPR on 10/7/2003 to clarify the comment. Mr Lee indicated that DPR meant to reference the third bullet.

Response to Comment 4: See response to Comment 1c.

> **Comment 5: Implementation Plan, element 5.** (Staff Report, page 19)
> A provision of the Implementation Plan offered in an earlier draft of the Staff Report required a regular review of the water quality objective, allocations, and implementation provisions. Presumably, the review of water quality objectives was deleted because, as noted in Chapter III of the Basin Plan, federal regulations call for states to review water quality standards at least every three years. Including this requirement in the Implementation Plan would be redundant.

Response to Comment 5: The comment is correct that periodic review of standards is already a federal requirement, and, therefore the requirement need not be reiterated in this Basin Plan Amendment.

> **Comment 6: Implementation Plan, element 8.** (Staff Report, page 20)
> Dischargers must now deal with three compliance criteria, each with a different time frame: the water quality objective for acute exposures (one-hour average), the water quality objective for chronic exposures (four-day average), and one-day load allocations. Dischargers will be required to develop and execute monitoring programs to test compliance with each criterion and report results (if waste discharge requirements or waivers are conditioned with monitoring and reporting requirements as proposed in the staff report [page 23]). The costs of such a requirement will be very high.
> Recommendation: There should be a way for dischargers to consolidate monitoring activities in order to keep costs down. For example, perhaps the time frame for the load allocations can be aligned with the time frames for the water quality objectives (i.e., one-hour or four-day load allocations; the one-hour allocation would be calculated based on a maximum allowable concentration of 0.080 µg/L, the four-day allocation on 0.050 µg/L).

Response to Comment 6: As part of the development of the monitoring and reporting requirements under a waiver or WDR program, an appropriately designed monitoring plan can provide the information needed to determine compliance while minimizing cost. Regional Board staff anticipates that in many cases daily sampling during critical time periods together with discharge (flow) measurements will be sufficient to assess compliance with the water quality objectives and allocations.

> **Comment 7: Implementation Plan, element 9.** (Staff Report, page 20)
> Many stakeholders are concerned that numeric water quality objectives will eventually apply in tributaries of the Sacramento and Feather Rivers. In such cases, diazinon discharges would have to be reduced so much that continued use in vulnerable watersheds might not be possible.
> Recommendation: Provide in the staff report an explanation why numeric water quality objectives will not immediately apply to tributaries. Is it because none of the tributaries, including the Colusa Basin Drain and the Sutter Bypass, currently have

cold, freshwater habitat beneficial uses? What are the prospects that numeric objectives would eventually apply in tributaries?

Response to Comment 7: See response to Comment 2 from Roberta Larson (Appendix E; 29 August 2003 Draft Final Staff Report). Regional Board staff anticipates developing a Basin Plan Amendment that addresses pesticides in surface water in the Sacramento Watershed. Such an Amendment would likely include numeric water quality objectives for any pesticide that alone or in combination could impact surface water quality. It should also be noted that over the last 3-4 years the Regional Board staff has received numerous comments from stakeholders insisting that numeric water quality objectives be developed in lieu of primary reliance on narrative water quality objectives. Regional Board staff believes that both numeric and narrative water quality objectives are important tools for the protection of the State's waters. The comment also raises a question with respect to considerations of cold, freshwater habitat uses and the establishment of numeric objectives for pesticides. In most cases, the establishment of a pesticide objective for the protection of aquatic life is not likely to be dependent on whether the freshwater habitat use is designated as warm or cold. The only case in which the cold/warm distinction would be important is if some particular cold or warm water species was especially sensitive to a particular pesticide.

3. David B. Weinberg, Howrey LLP, Attorneys at Law; Representing Makhteshim-Agan of North America, Inc.

General Comment 1: The Draft Final Report Fails to Comply With the Porter Cologne Act, and the Regional Board Has Time to Fix this Flaw

MANA repeatedly has explained in prior filings why it believes the adoption of the proposed diazinon targets (water quality objectives) and overall water quality standards would be inconsistent with the Porter Cologne Act and Federal Clean Water Act. Essentially, we have argued that the objectives and standards inadequately consider the mandate of Section 13000 of PCA to be "reasonable" and reflect a fair balancing of the "economic and social" values at issue. We also have explained that the proposed water quality objectives, in particular, fail to meet the mandates of Section 13241 of PCA to be reasonably achievable and reflect a fair evaluation of economic considerations.

The Staff has not responded favorably to our concerns, and has continued to build its proposals on a flawed foundation. Two recent reports both of which are attached, further demonstrate why this has been an error, while a third demonstrates that the Staff and the Regional Board still have time to correct it.

……

This [review of the administrative record of the Basin Plan's narrative toxicity and pesticide objectives] also confirms that the only fair way to interpret the relationship between the Basin Plan's very specific "pesticide" standard – which is to be made

> even more specific as to diazinon and other dormant spray pesticides by the Proposed Amendment – and the general "toxicity" standard is to view the more specific as controlling the more general.[7] The report specifically quotes the Staff's 1990 characterization of the pesticide standard as being distinguished from the toxicity objective to "make it easier for pesticide dischargers to understand their obligations."[8] This can only happen if the "pesticide" standard trumps the "toxicity" standard.
>
> The DFR attempts to bolster a contrary view but does not provide any factual basis or rationale for its interpretation.[9] In light of the history described in Attachment A, the Draft Final Report's approach is unsustainable, arbitrary and capricious. When it acts on the diazinon issue, the Regional Board should avoid future confusion and error by confirming for the regulated community and public as a whole that compliance with the law will be judged by whether there has been compliance with the diazinon-specific pesticide water quality objective and the corresponding program directed at diazinon and orchard spray concerns.
>
> …..
>
> Thus, neither the Staff nor the Regional Board itself need be concerned that rethinking of key aspects of the proposals embodied in the Draft Final Report will be environmentally damaging. The Staff and Regional Board have time to have the Basin Plan amendments reconsidered to reflect these fundamental flaws, and should do so.

Response to General Comment 1: Regional Board staff has responded in detail to various points raised by MANA with respect to the adequacy of the Basin Plan Amendment and staff report (see Appendix E of the 29 August 2003 Staff Report). Regional Board staff has clearly documented that the proposed water quality objectives can be reasonably achieved within the timeframe for compliance.

Recent monitoring data included in the staff report and referenced by MANA indicate that the objectives are nearly being achieved on a consistent basis. In addition, Regional Board staff has documented a wide range of available management practices that can be used to mitigate diazinon runoff further or would allow growers to avoid using diazinon altogether. The combination of the recent monitoring information and the readily available management measures clearly indicate that the water quality objectives represent water quality conditions that can be reasonably achieved.

The two reports referenced by MANA (Larry Walker Associates (LWA), 2003; Stone Environmental, Inc., 2003) do not identify any flaws in the proposed Basin Plan Amendment or the Staff Report. The LWA report identifies purported flaws in previous Basin Planning efforts, rather then an evaluation of the current Basin Planning effort.

The modeling report by Stone Environmental does not provide any evidence that the Staff Report or Basin Plan Amendment is flawed. If accurate, the Stone Environmental model appears to indicate that proposed water quality objectives are readily achievable. Since the Stone Environmental model included years of high diazinon use, rather than

just recent use patterns, the projected number of exceedances likely overestimates the number of future exceedances.

The maxim that "the specific controls the general" is a general rule of statutory construction and does not apply to water quality permitting. (See, e.g., 40 C.F.R. §144.22(d) [NPDES regulations require permits to include effluent limits that ensure discharges will not exceed *any* water quality objective].) The narrative pesticide and toxicity objectives must continue to apply to address additive and synergistic effects.

> **General Comment 2:** Unless the Proposed Amendments are Substantially Revised, the Regional Board Should Be Explicitly Told that It is Embarking on an Unfair Program of Enforced Collective Responsibility, Measured Against Unachievable Standards
>
> As crafted, the proposed Basin Plan could significantly penalize all users of diazinon if any subset of those users acts irresponsibly. This is the result of the phrasing of new paragraph 7 of the amended Basin Plan (which appears at page 18 of the Draft Final Report).
> ….
> MANA recognizes that the fundamental unfairness of the collective responsibility approach may be mitigated if, as expected, either a agricultural discharge waivers or WDRs of some sort are implemented. At present, however, the future of those programs remains unsettled. The Regional Board thus should be sensitive to the implications of the proposed amendments in the event that the waiver or general permit program is not put in place, and should require revisions to the proposal that will avoid such unfairness.

Response to General Comment 2: See response to DPR Comment 1e. In this comment, MANA also raises some issues that they repeat in more detail in Comment 12. The staff response is given in response to Comment 12.

> **General Comment 3:** The Draft Final Report Improperly Resists Using a "Percentage of Exceedences" Standard to Evaluate Compliance with Diazinon Targets
>
> In prior comments, MANA has noted that, even if the Board were to adopt as diazinon targets the CDFG numbers which MANA believes inappropriate, it must reconsider the methodology for determining whether compliance with those targets has been met. Essentially, we have explained that current scientific thinking does not support using in the context of nonpoint source evaluations the 1 hour and 4 day averages (as to which 1 exceedence in 3 years is a violation of the target) – mechanisms that were developed for use in connection with point sources. Instead, a "percentage of exceedences" methodology should be adopted. The Staff consistently has rejected this recommendation. …

Response to General Comment 3: Staff has responded extensively to these comments previously (see response to MANA's Comments 8-10 contained in Appendix E of the 29 August 2003 Staff Report). Staff appreciates that there is an ongoing scientific dialogue regarding water quality criteria for protection of aquatic life. Discussing or questioning the assumptions of the USEPA method (USEPA, 1985) is an appropriate part of this dialogue, but does not justify rejection of the method by the Regional Board. Especially, since that USEPA method is the only currently approved guidance for developing water quality criteria for the protection of aquatic life and serves as the basis for hundreds of standards throughout the country.

MANA has also apparently misunderstood both the National Research Council report (NRC, 2001) and staff comments on the use of statistical methods. The NRC report clearly does not support either a 10% exceedance rate or a particular statistical method for assessing compliance with standards.

The NRC report states: "The committee does not recommend any particular statistical method for analyzing monitoring data and for listing waters. However, one possibility is that the *binomial hypothesis test* could be required as a minimum and practical first step (Smith et al., 2001)." Further on the report states: "Both the raw score and binomial approaches require the analyst to "throw away" some of the information found in collected data. For example, if the criterion is 1.0, measurements of 1.1 and 10 are given equal importance, and both are treated simply as exceeding the standard. Thus, a potentially large amount of information about the likelihood of impairment is simply discarded." Staff does not oppose using statistical methods, but is opposed to discarding important and relevant information in assessing compliance with standards. Therefore, staff does not believe the Basin Plan Amendment or staff report should identify any particular statistical method for evaluating compliance.

With respect to the 10% exceedance rate, the NRC report states: "A determination of 10 percent cannot be expected to apply to all water quality situations. In fact, it is inconsistent with federal water quality criteria for toxics that specify allowable violation frequencies of either one day in three years, four consecutive days in three years, or 30 consecutive days in three years (which are all less than 10 percent)." The proposed diazinon objectives were derived using the same methodology as federal water quality criteria for toxics. Any deviation from the one in three year exceedance rate to the more frequent 10% exceedance rate would need a clearly supported biologically based justification. There is no evidence that allowing toxic conditions 10% of the time would be protective of beneficial uses.

Specific Comments from MANA

Comment 1: Summary: The Draft Final Report fails to properly describe or acknowledge a decade-long trend in diazinon surface water concentrations. Recommendation: The text and graphs recommended in Comment 3 of the June 2003 Comments should be inserted into Section 1.3.2. Additionally, the DFR should include the San Joaquin and Sacramento River Watershed diazinon trend data noted in the two peer reviewed documents referenced below.

Response to Comment 1: More recent data has already been added to the Staff Report as requested (see response to MANA's Comment 1 contained in Appendix E of the 29 August 2003 Staff Report). Also see the updated graphs and tables in Appendix A of the 29 August 2003 Staff Report.

Comment 2: Summary: The DFR continues to effectively misattribute the cause for decreasing diazinon use to crop value declines. Recommendation: MANA maintains that the text and graphs recommended in Comment 3 of the June 2003 Comments should be inserted into Section 1.3.2. See also Comment 1, supra.

Response to Comment 2: Staff has previously responded to this comment (see response to MANA's Comment 3 contained in Appendix E of the 29 August 2003 Staff Report). Other factors influencing historic diazinon use have also been included.

Comment 3: Summary: The DFR does not clarify that the "toxicity" water quality objective does not apply to a situation properly addressed by the "pesticides" objective. Recommendation: MANA recommends that the third paragraph of the Section 1.4 be revised to read as follows:

> Federal law requires the establishment of TMDLs for waters not attaining water quality standards (CWA § 303(d)(1)(C)). Federal regulations require the incorporation of approved TMDLs into the State's water quality management plan (40 CFR § 130.7(d)(2)). Every region's Basin Plan and any statewide plans or policies constitute California's water quality management plan. The extensive study that the Regional Board staff has undertaken in connection with diazinon provides a basis for preparing such an amendment, and also for clarifying that the amendment will provide the specific, sole mechanism for regulating diazinon releases.

Response to Comment 3: Staff has previously responded to this comment (see response to MANA's Comment 4 contained in Appendix E of the 29 August 2003 Staff Report). As staff explained previously, adoption of a site-specific numeric objective does not preclude application of narrative objectives to that pollutant.

Comment 4: Summary: The DFR illegally misapplies the toxicity water quality objective to a pesticide water quality issue. Recommendation: Delete the second, third, and fourth sentences of the first full paragraph on page 27 and replace it with the following text:

> Some have read this objective as imposing requirements with regard to pesticides that are different from those set forth in the "pesticide objective." This is not the case: it is a basic principle of law that the more specific governs the more general,

and review of the history of development of the "toxicity criterion" reveals that it was understood to be redundant as to pesticides and, in any event, was not subject to the comprehensive analysis required by the Porter Cologne Act before its adoption. The proposed Plan Amendment, when adopted, will make it clear that users of diazinon and those concerned about its impact on waterways should direct their attention to the pesticide objective, not the more general toxicity objective, in evaluating compliance with the Basin Plan.

Response to Comment 4: Staff has previously responded to this comment (see response to MANA's Comment 4 contained in Appendix E of the 29 August 2003 Staff Report). Also see Response to Comment 3 above.

Comment 5: Summary: MANA's has already indicated that the proposal to use 1-hour and 4-day averages with CDPR methodology for setting the targets is inappropriate and has proposed an alternative exceedence frequency measure. *See* June 2003 Comments at Comment 10. However, the Staff failed to adequately respond to MANA's concerns regarding the 1-hour and 4-day averages. Recommendation: Even if the Draft Final Report continues to rely on CDFG targets, the application of these targets for determining violations based on chemical monitoring data must take into account the unique characteristics of non-point source discharges.

Response to Comment 5: See response to MANA General Comment 3 above.

Comment 6: Summary: The Anti-Degradation Policy cannot be used as support for numeric water quality objectives that do not meet Porter-Cologne Act requirements of achievability and reasonableness. Recommendation: Delete Section 4.4.1 and rename Section 4.4 "Consistency of Alternate Methods with State and Federal Law." Also, delete the text of Section 4.2.2 and replace it with the following:

> In applying the State Board's anti-degradation policy, Regional Board policy states "Maintenance of the existing high quality of water means maintenance of 'background' water quality conditions…." Any change in the high quality of the Sacramento or Feather River must be to the maximum benefit of the people of the State as established, in this instance, pursuant to Section 13241 of the Porter-Cologne Water Quality Control Act. Please see Sections 4.3.2 through 4.3.5, and 8 for more information.

Response to Comment 6: Staff has previously responded to this comment (see response to MANA's Comment 7 contained in Appendix E of the 29 August 2003 Staff Report). Staff believes it is appropriate to evaluate each alternative relative to pertinent laws and policies, such as the anti-degradation policy.

Comment 7: Summary: MANA's prior comments indicated that the prior version of the DFR: (1) proposed a diazinon TMDL based on outmoded methodology that was not designed for application to non-point source issues and should have instead been based on up-to-date, available, applicable non-point source evaluation methodologies;

and (2) cited scientifically inaccurate and unfounded grounds in its rejection of modern methodologies for target setting. (See June 2003 Comments at Comments 8 and 9.) Neither Staff's comment response nor the DFR adequately address the concerns raised in MANA's comments. Recommendation: MANA continues to recommend that the analysis underlying the choice of "targets" be redone with reliance upon CDFG numbers replaced by reliance upon the numbers determined by SSDs.

Response to Comment 7: Staff has responded extensively to these comments previously (see response to MANA's Comments 8-10 contained in Appendix E of the 29 August 2003 Staff Report) and response to General Comment 3 above. The USEPA methodology has been used to derive criteria that apply to hundreds of the nation's waters irrespective of the source of pollution. Staff has also carefully evaluated the alternative proposed by MANA and found significant scientific and legal deficiencies that are detailed in the previous response to comments and in the Staff Report.

Comment 8: Summary: The DFR continues to present as scientifically well-established, certain conclusions regarding diazinon impacts to endangered species that are incorrect. Recommendation: Section 4.4.3 should be deleted and replaced with the following text:

Several species of special concern, including the federally threatened splittail *(Pogonichthys macrolepidotu*s) and the state- and federally-endangered winter-run Chinook salmon *(Oncorhynchus tshawytscha*), occur in the Sacramento and San Joaquin Rivers and Delta (www.dfg.ca.gov/hcpb/species/t_e_spp/tefish/tefisha.shtml). Under law, the selected water quality objectives must protect these species. The water quality objective is below the proven levels at which deleterious effects on those species from diazinon may occur. The water quality objective is therefore protective of these endangered species.

Response to Comment 8: Staff has responded to these comments previously (see response to MANA's Comment 12 contained in Appendix E of the 29 August 2003 Staff Report). The Regional Board believes that the endangered species discussion has been appropriately characterized in the Staff Report.

Comment 9: Summary: The DFR fails to defer to the expertise of the regulators (*e.g.*, CDPR) and the regulated community – an unreasonable failure in light of those parties' experience in evaluating, and ongoing efforts to adopt, practical and effective best management practices to control pesticide runoff. Recommendation: Section 5.1 should be further revised to recognize the forthcoming mandatory requirement that BMPs be used to reduce runoff and drift.

Response to Comment 9: Staff has responded to these comments previously (see response to MANA's Comment 13 contained in Appendix E of the 29 August 2003 Staff Report). The Staff Report already includes a discussion of the pending and completed actions by CDPR, USEPA, and the regulated community (see Section 1.3.1).

Comment 10: Summary: The DFR fails to acknowledge the lead role of CDPR – as the State Water Resources Control Board has already done – in regulating the use of pesticides and corresponding leadership role in creating solutions to water quality impacts stemming from that pesticide use. Recommendation: The Draft Final Report discussion appearing at 50-52 should be revised to emphasize the greater expertise of CDPR in development of BMPs and its sole ability to impose enforceable requirements that must be followed in the application of pesticides. A similar revision should be made to the DFR at 67, section 5.3.11. CDPR should be acknowledged in the Draft Final Report, at 67, as the lead agency on the regulation of pesticide use as it impacts water quality and as playing a central role in TMDL implementation.

Response to Comment 10: Staff has responded to these comments previously (see response to MANA's Comment 14 contained in Appendix E of the 29 August 2003 Staff Report). The Staff Report includes a discussion of CDPR's role in pesticide regulation and CDPR has not indicated that their role has either been misstated or understated.

Comment 11: Summary: The DFR continues to understate the nature and implications of the actions being taken by CDPR and the Agricultural Commissioners – actions which suffice to implement the diazinon TMDL. Recommendation: Section 5.3 should be revised to recognize the efforts underway by CDPR and the Agricultural Commissioners and that this approach meets most efficiently all of the goals of a TMDL implementation plan.

Response to Comment 11: Staff has responded to these comments previously (see response to MANA's Comment 16 contained in Appendix E of the 29 August 2003 Staff Report). Also see response to Comment 10 above.

Comment 12: Summary: The DFR neither establishes the time scale over which load allocation will be calculated to assess compliance nor addresses the uncertainties that may be inherent to the scale that will be used. Using a compliance assessment which ignores the spatial and temporal variability of the diazinon loading processes will likely result in a load allocation that mandates surface water concentrations that are significantly more stringent than the TMDL. Recommendation: DFR Sections 5.5.3.2, 5.7, and 7 must be modified to: (1) describe in greater detail how compliance with the load allocation will be determined; and (2) apply a load allocation compliance assessment method which takes into account the spatial and temporal variability of the diazinon loading processes.

Response to Comment 12: The proposed Basin Plan Amendment and Staff Report already describe how the load allocation will be determined. The Loading Capacity is first calculated based on the daily or four-day average flow (depending on the water quality objective) times the water quality objective. The Loading Capacity is then divided up among the four sub-watersheds (i.e. for the Sacramento River at Verona site) according to the Load Allocation factors described in Table IV-5 of the Basin Plan Amendment. Since the Load Allocations are derived from the Loading Capacity, the

Load Allocations will be expressed as a daily load and four-day average load for the acute and chronic diazinon water quality objectives, respectively.

The second point states that the load allocation method should be changed to account for the spatial and temporal variability of the diazinon loading process. The load allocation method already accounts for temporal variability, since it is based on the measured daily flow at the site where the Loading Capacity is calculated. Spatial variability is taken into account by dividing up the Loading Capacity by sub-watershed based on the crops that primarily use diazinon during the dormant season.

MANA seems to suggest that this method should be further amended to account for the intensity of precipitation and the pesticide applications that occur prior to the precipitation event. MANA does not propose a specific method for an alternative allocation method. An allocation method based on current diazinon use and intensity of rainfall events would seem to encourage an increase in the application of diazinon when storms are predicted, so that the allocation for the sub-watershed would be increased.

MANA also states that it believes it is unfair for the Feather River to get a load allocation that would result in a concentration less than the water quality objective. This can occur since the relative amount of orchard acreage in the Feather River watershed is low compared to the amount of dilution flow available, when compared to the other sub-watersheds. The staff proposed load allocation method is based on relative orchard acres in each sub-watershed. MANA appears to suggest that a more appropriate allocation method would be based on the amount of dilution flow available in each sub-watershed. Staff believes that its proposed allocation method is more equitable, since responsibility for reductions is distributed based on crops that could use diazinon rather than whether an orchard happens to be located in a sub-watershed with a great deal of dilution flow.

It appears that many of MANA's concerns are based on the perceived unfairness of a violation of the load allocation occurring due to isolated storms when no violation of the objective occurs. The Regional Board will continue to have enforcement discretion with respect to any exceedances of load allocations or water quality objectives. Also see response to DPR Comment 1.

Comment 13: Summary: The DFR goals set forth in section 7.1 are overly complicated and are not needed to establish compliance with the diazinon TMDL. Recommendation: Delete paragraphs 1-4 and 6 of Section 7.1. Instead add the following text:

> The Regional Board is currently in the midst of identifying the details and goals of an extensive monitoring program to support the Agricultural Irrigation Return Flow Waiver. That monitoring program will not only address the needs of the Waiver, but will also meet the Regional Board's requirements for monitoring compliance with the diazinon TMDL. The Regional Board will add the goals and details established in the Waiver effort to this Section when that information becomes available.

Response to Comment 13: Staff has responded to these comments previously (see response to MANA's Comment 18 contained in Appendix E of the 29 August 2003 Staff Report). Staff believes that the monitoring requirements are necessary to determine compliance with the diazinon objectives and allocations, as well as identifying potential impacts from replacements for diazinon.

Comment 14: Summary: Concentration distributions in surface waters are usually highly right skewed due to the large number of non-detections. However, normal distribution techniques using means and standard deviations are not the only statistical methods available. There are alternatives that can fit skewed data distributions and which are recommended for use in this particular context by the National Research Council (*see* NRC (2001)). Non-parametric methods such as percentiles are commonly used to display and interpret the distribution and thereby avoid the non-detection bias. DFR Section 7 should be modified to apply a non-parametric method to the monitoring program, thereby allowing further analysis on the distribution of detections in collected compliance datasets. Recommendation: DFR Section 7 should be modified to apply a non-parametric method to the monitoring program, thereby allowing further analysis on the distribution of detections in collected compliance datasets.

Response to Comment 14: See Response to MANA General Comment 3.

Comment 15: Summary: DFR Appendix A, Section A.5 says that the Sacramento River at Verona was chosen to define the loading capacities because it contains runoff from nearly all agricultural sources of diazinon to the Sacramento River. However, because of diversions which occur at high flows above Verona, the loading capacity measured at Verona will often be unrepresentative of the combined flows of the Feather and Sacramento Rivers near their confluence. This will result in much lower upstream loading capacities than is appropriate. The artificially low loading capacity will result in the imposition of unfairly low targets for growers above Verona. Recommendation: The DFR load allocation analysis must: (1) explicitly address the issue of the Yolo Bypass and its potential effect on the determination of load allocations; and (2) be modified to take this effect into account.

Response to Comment 15: Regional Board staff has proposed late revisions to the Basin Plan Amendment that addresses the need to add any flood control diversions into the Yolo Bypass or Butte Sink to the loading capacity calculations.

Comment 16: Summary: The DFR must demonstrate that the load capacity and load allocation can actually be achieved at the compliance points. However, Appendix A fails to address the attainability of the load allocations. Recommendation: Since the loading capacity, by definition, is the ability of a reach to assimilate a pollutant load, the loading capacity could be used to determine whether the beneficial use of the water is being preserved. This approach would maintain the justification for and integrity of the biologically-based water quality objective, make it very clear what the expectation for compliance is, and reduce the potential for disagreement. If this

approach cannot be taken, then DFR Appendix A must be modified to include an analysis that compares the actual loads to load allocation values based on historical conditions to fully assess the achievability of this TMDL load allocation.

Response to Comment 16: The Staff Report documents a wide variety of approaches that can be used to reduce or eliminate diazinon runoff. In recent years, forgoing use of diazinon altogether has been a viable management practice for about 80% of the almond, peach, and dried plum growers in the Sacramento Valley. For those growers that continue to use diazinon, a variety of pesticide application practices and runoff management practices are available to reduce diazinon even further. In addition, recent data suggest that diazinon objectives are nearly being met on a regular basis. This suggests that the loading capacities are generally being met and that minor reductions in diazinon loading should result in consistent compliance.

The analysis suggested cannot be performed in a meaningful way, since recent monitoring efforts have not included concurrent collection of water quality and flow information at the four sub-watershed sites. Despite this lack of data, there is no reason to believe that meeting the load allocation in an individual sub-watershed will be more difficult than the collective effort to meet the downstream loading capacity. Since the load allocations merely represent the partitioning of the loading capacity between several sub-watersheds, dischargers in each sub-watershed will likely require a similar level of effort to make the incremental diazinon reductions necessary to meet both the load allocations and loading capacity.

Comment 17: Summary: The peer review process used to test the DFR was neither properly implemented nor successful in subjecting either the DFR or the proposed Basin Plan amendments to vigorous scientific or policy review. Recommendation: The DFR should either: (1) acknowledge the lack of scientific rigor and process planning that would typify a peer review process, provide more information on the process that resulted in the reviews, and provide information regarding the reviewer's selections and qualifications; or (2) re-initiate the peer review using more rigorous and publicly disclosed standards for process, qualifications, and end-product; or (3) dispose of the idea of peer review altogether and cease making any claims that a rigorous, impartial, and qualified review took place.

Response to Comment 17: Staff has responded to these comments previously (see response to MANA's Comment 20 contained in Appendix E of the 29 August 2003 Staff Report). In response to MANA's previous comment, staff provided detailed documentation of the peer review process, which clearly shows that it was properly implemented (see Appendix B of the 29 August 2003 Staff Report). Staff does not agree with MANA's characterization of that process. In addition, MANA apparently misunderstands the purpose of the peer review process, which is to provide scientific review and not policy review.

Comment 18: Summary: Staff and other government representatives have incorrectly suggested that the State Water Resources Control Board's Section 303(d)

designation establishes current impairment of the identified water bodies, when in fact it simply results from an estimation of impairment based on limited or inadequate data. Recommendation: To avoid any misunderstanding, the DFR should be expanded to explain that inclusion of a water body segment on the Section 303(d) list is not a finding of actual impacts to species or a quantification of the extent to which beneficial uses have actually been impaired.

Response to Comment 18: Staff has responded to these comments previously (see response to MANA's Comment 19 contained in Appendix E of the 29 August 2003 Staff Report). Staff believes that its characterization of the Section 303(d) listing is accurate and consistent with the law.

4. Roberta L. Larson, Somach, Simmons & Dunn, Attorneys at Law; Representing the City of Roseville

Comment 1: … the City's most significant issue remains unresolved—the adoption of wasteload allocations (WLAs) for point sources that have not been demonstrated to be attainable.

Response to Comment 1: Staff has responded to this comment previously (see response to City of Roseville's Comment 1 contained in Appendix E of the 29 August 2003 Staff Report). Staff still believes that the available data and information clearly indicates that banning the sale of diazinon products for non-agricultural use will result in no or minimal diazinon discharges by the compliance date.

Comment 2: We recommend that the proposed amendment account for the possibility that the ban on use will not be entirely sufficient to meet the water quality objective by providing a clear mechanism for the revision of waste load allocations in advance of the compliance dates if monitoring demonstrates the ban is not sufficient to reduce diazinon levels in effluent below the objective. The proposed TMDL does include a provision for review of the allocations once every five years, beginning no later than June, 2007. We recommend that this provision be strengthened to *require* a re-assessment of the WLAs [waste load allocations], and to include a statement that the WLAs and the associated compliance schedules *will be* revised if the federal ban is not sufficient to achieve compliance.

Response to Comment 2: The Basin Plan Amendment already states that the diazinon allocations and implementation provisions will be reviewed. It would be inappropriate to commit the Regional Board to revising the compliance schedules and waste load allocations if that review indicates the federal ban is not sufficient. Any change to the waste load allocations would need to be balanced by changes to the load allocations to agriculture. In the unlikely event that the ban on diazinon does not appear sufficient to meet the WLAs, the Board may, during the review process, decide that the WLA is appropriate. The Board may also evaluate the options available to NPDES permittees to meet that waste load allocation.

Comment 3: …the Regional Board could simply make clear in the Basin Plan amendment that the implementation program for point source wasteload allocations is pollution prevention, best management practices and source control. This can be accomplished by amending paragraph 4 on page VI-36-01 as follows:

5. The waste load allocations for all NPDES-permitted discharges <u>directly to the Sacramento and Feather Rivers</u> are the diazinon water quality objectives<u>, taking into account dilution in the receiving water</u>. <u>The waste load allocations for POTWs are to be met by implementation of source control and pollution prevention programs.</u>

Response to Comment 3: Staff has responded to this comment previously (see response to City of Roseville's Comments 1, 5, and 6 and the response to the City and County of Sacramento stormwater programs' Comment 4 contained in Appendix E of the 29 August 2003 Staff Report). With respect to accounting for dilution, the loading capacity has been fully allocated, including a margin of safety.

In addition, the statement requiring implementation of source control and pollution prevention programs is inappropriate. Federal NPDES regulations require NPDES permits to include appropriate technology-based or water quality based effluent limits for publicly owned treatment works (POTW). Since Porter-Cologne does not allow the Regional Board to dictate the manner of compliance with the effluent limitations (see Water Code section 13360), the proposed language could put the Basin Plan in conflict with State law. Of course, POTWs are free to implement source control and pollution prevention programs as needed to meet effluent limits in their permits. However, the POTWs must also take whatever additional steps are necessary to comply with effluent limits.

5. Bill Busath, Supervising Engineer; City of Sacramento

Comment 1: NPDES-permitted [stormwater] dischargers should be considered to be in compliance with the waste load allocations when the diazinon water quality objectives are met in the rivers. *Requested Action:* Provisions 3 and 4 of Chapter IV, Implementation, pertaining to Orchard Pesticide Runoff and Diazinon Runoff, should be amended to state that "NPDES-permitted dischargers will be considered to be in compliance with the waste load allocations when the diazinon water quality objectives are met in the river reaches specified in Table III-2A."

Response to Comment 1: Staff has responded to this comment previously (see response to the City and County of Sacramento stormwater programs' Comment 4 contained in Appendix E of the 29 August 2003 Staff Report and response to City of Roseville Comment 3). The suggested language regarding compliance with waste load allocations is not necessary. The waste load allocations are not self-enforcing. The Regional Board enforces them by incorporating the allocations as effluent limits in NPDES permits. The effluent limits are subject to the maximum extent practicable (MEP) standard to the extent set forth in the permit and as allowed by federal stormwater regulations.

Comment 2: The proposed Waste Load Allocations for NPDES-permitted [stormwater] dischargers are overly stringent, and should be modified. *Requested Action:* Provision 4 of Chapter IV, Implementation, pertaining to Orchard Pesticide Runoff and Diazinon Runoff, should be amended to state that "the waste load allocations for municipal stormwater NPDES-permitted dischargers shall be set to a per-event loading equal to the 95th percentile diazinon concentration, as measured during wet weather events during 1998-2003, times the event runoff flow".

Response to Comment 2: See response to City of Roseville's Comment 1 above. The requested action has a number of flaws: 1) The proposal is not clear, since event and wet-weather event are not defined and 95th percentile diazinon concentration referenced is not clear (is the concentration to be used from specific sumps, or creeks, or other receiving waters?); and 2) if the calculated 95th percentile diazinon concentration is greater than the proposed waste load allocation, the load allocations would need to be reduced. As has been discussed previously, it does not seem reasonable to reduce the load allocations for agricultural in favor of higher allocations for urban areas, since urban uses are being banned and agricultural uses will continue.

> **Comment 3:** The waste load allocations should defer to existing NPDES [stormwater] permit provisions. *Requested Action:* Provision 4 of Chapter IV, Implementation, pertaining to Orchard Pesticide Runoff and Diazinon Runoff, should be modified to state that, "Municipal Stormwater NPDES Permit-holders shall be considered to be in compliance with these waste load allocations provided that they have demonstrated compliance with the NPDES permit requirement to control pollutant discharges to the maximum extent practicable, and are in compliance with any applicable permit provisions requiring control of pesticide discharges".

Response to Comment 3: See response to Comment 1. The Requested Action includes language that would be more appropriately incorporated into the NPDES permit, rather than the Basin Plan. At the time the permit is renewed or reopened, the Regional Board can determine if such language is appropriate.

> **Comment 4: Adoption of DF&G Criteria as Water Quality Objectives Needs Further Study *Requested Action:*** The proposed revisions to Chapter III, Water Quality Objectives, Tables III-2A (Section 2 of the Staff Report), should be reviewed (and if appropriate amended) as follows:
>
> a) Replication of DF&G criteria development (toxicity studies) should be performed according to standard scientific principles, and the Specific Pesticide Objectives should be adjusted as deemed appropriate by an independent scientific review panel, following completion of such studies. b) As the Basin Plan Amendment proposes adoption of the DF&G criteria as site-specific water quality objectives, consideration also should be given to site-specific conditions, including mitigating factors, in the Sacramento River and its major tributaries. A site-specific objectives study should be performed for the major reaches affected by the Basin Plan Amendment, according to procedures contained in USEPA guidance and the State Water Resources Control Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. c) The proposed water quality objectives should be revised as appropriate following application of proper legal process in adoption of water quality objectives pursuant to California Water Code sections 13241 and 13242.

Response to Comment 4: Staff has responded to this comment previously (see response to the City and County of Sacramento stormwater programs' Comment 1 contained in

Appendix E of the 29 August 2003 Staff Report). Regional Board staff believes the suggested language is unnecessary and unclear. It is not clear from the proposed language who is responsible replicating the over forty toxicity studies on numerous species that the Department of Fish and Game used. Since the Department of Fish and Game carefully evaluated those studies to determine whether established scientific protocols were followed, it is unclear why it would be necessary to repeat all of those studies. It is also unclear why one would expect that a site-specific objectives study would result in different diazinon water quality objectives. Before requiring such studies, the Regional Board would need to justify their necessity. Finally, the Commenter suggests that the water quality objectives be adjusted as deemed appropriate by a scientific review panel. There is no provision in Porter-Cologne or the Clean Water Act for the Regional Board to delegate its judgment with respect to standard setting to another entity.

6. Wendell Kido, Chief, Policy and Planning; Sacramento Regional County Sanitation District

Comment 1: The proposed Waste Load Allocations (WLAs) for point source dischargers could be interpreted as end-of-pipe effluent limitations with no consideration for dilution or assimilative capacity. The staff report presumes that a federal ban on urban uses will decrease diazinon discharges from point sources. However, if the ban alone is not effective in reducing diazinon discharges, an undue burden will be placed on POTWs and municipal stormwater agencies to implement treatment at significant cost to ratepayers. We recommend clarifying the language in the amendment to assist permit writers in considering dilution and assimilative capacity.

Response to Comment 1: See response to the City of Sacramento's Comment 1 and the response to the City of Roseville's comments.

Comment 2: Waste Load Allocations should be implemented only when the river is not in compliance with its objectives. We recommend the following addition to the language in the amendment, Chapter IV Implementation (pg 19 in the Staff report): 4. The waste load allocations for all NPDES-permitted dischargers are the diazinon water quality objectives at those times when the river is not in compliance with its objectives.

Response to Comment 2: See response to City of Sacramento's Comment 1 and the response to the City of Roseville's Comment 3. It should be noted that both waste load and load allocations are designed to ensure compliance with water quality objectives. Requiring compliance with waste load and load allocations only after further non-compliance with water quality objectives would defeat the intent of establishing the TMDL, which is to ensure attainment of water quality standards.

7. Steve Beckley, President/CEO; California Plant Health Association

Comment 1: The draft final staff report (DFSR) fails to acknowledge that declining trends in diazinon use are probably the result of changes in regulatory pesticide use requirements, industry educational efforts, increased grower awareness and changes to grower cultural practices.

Response to Comment 1: Staff has responded to this comment previously (see response to the MANA's Comments 2 & 3 contained in Appendix E of the 29 August 2003 Staff Report). Staff has identified the factors that have likely contributed to decreases in diazinon use. Since no regulatory changes in agricultural diazinon use have yet been implemented, it would not be appropriate to identify such pending changes as responsible for past declines in use. Also see response to MANA Comment 9.

Comment 2: CPHA supports the DFSR's limitation of the Basin Plan Amendment to the mainstem of the Sacramento & Feather Rivers but is concerned that provision 9 of the implementation program defeats the Regional Board's intent. … According to the report [LWA, 2003], the toxicity objective and the pesticide objective were not adopted in compliance with all provisions of Porter-Cologne. Consequently, the Regional Board's reliance on such objectives to utilize more stringent criteria than those proposed as part of this basin plan amendment is inappropriate and unfounded. Provision 9 of the implementation program must be deleted from the proposed amendment for it undercuts compliance with Porter-Cologne and renders the specificity of the proposed water quality objective as null and void should the Regional Board so desire.

Response to Comment 2: Staff has previously responded to this comment (see response to MANA's Comment 4 contained in Appendix E of the 29 August 2003 Staff Report). As staff explained previously, adoption of a site-specific numeric objective does not preclude application of narrative objectives to that pollutant. Additional discussion on the need for provision 9 is given in the proposed late revisions to the staff report (see LATE REVISIONS – 16 OCTOBER 2003 HEARING; 7 OCTOBER 2003 VERSION).

Comment 3: The prohibition against the direct or indirect discharge of diazinon if the water quality objective or the load allocations are exceeded in the previous year places an unfair burden on all growers. Under this prohibition, all growers are prohibited from discharging diazinon if there is an exceedence of either the water quality objective or load allocation regardless of the best management practices employed by the grower. In other words, if one bad actor spills diazinon into the Sacramento or Feather River and an exceedance of the water quality objective or the load allocation is triggered, the following year all growers must subject themselves to a conditional waiver, individual waste discharge requirements or general waste discharge requirements, regardless of the individual's intent (i.e. negligence or purposefulness) or use of best management practices.

Response to Comment 3: See response to DPR Comment 1e. Also see the Additional discussion on the prohibition in the proposed late revisions to the staff report (LATE REVISIONS – 16 OCTOBER 2003 HEARING; 7 OCTOBER 2003 VERSION). It should be noted that dischargers are already required to "subject themselves" to a waiver of waste discharge requirements or waste discharge requirements if they are discharging waste.

> **Comment 4:** The implementation plan inappropriately requires compliance with load allocations as well as the water quality objective. …Since compliance with the load allocation is not legally required or a necessity, and since the basin plan amendment with regard to compliance with the load allocation is not clear, the provision should be deleted from the basin plan amendment.

Response to Comment 4: See response to DPR Comment 1d. Also, the Commenter justifies their assertion based on an incorrect interpretation of a 9th Federal Circuit Court decision. *Pronsolino v. Nastri* (9th Cir. 2002) 291 F.3d 1123, addressed whether USEPA could issue a TMDL for the Garcia River, which was impaired solely by non-point sources. The court ruled that the Clean Water Act requires states to have an implementation plan for every TMDL, including TMDLs that only involved non-point source discharges. The court noted that USEPA could only force the states to carry out implementation by withholding grant funds, but that states "do have to come up with them." (*Id*. at 1140, n. 19, citing Oliver A. Houck, *The Clean Water Act TMDL Program: Law, Policy, and Implementation 49-56* (1999).) As the Commenter notes in footnote 2, the Clean Water Act does require the implementation plan. The only reason why the USEPA's Garcia River TMDL did not include an implementation plan was that such plans are solely the State's responsibility and the Garcia River TMDL was issued by USEPA, not California. Nothing in *Pronsolino* suggests that states *cannot* carry out implementation plans, even if a state is willing to forego section 319 funds, which the Regional Board is not.

Porter-Cologne also requires an implementation plan. (CWC section 13242.) Unlike the Clean Water Act, Porter-Cologne requires a regional board to carry out implementation plans, e.g., by issuing waste discharge requirements to effectuate them. (See CWC section 13263(a).)

> **Comment 5:** The goals of the monitoring program are inappropriate at this time and do not allow for Regional Board flexibility as other monitoring information becomes available.

Response to Comment 5: Staff has responded to these comments previously (see response to MANA's Comment 18 contained in Appendix E of the 29 August 2003 Staff Report). Also see Response to MANA Comment 13.

8. Joe Dillon, NOAA Fisheries

Comment 1: …I have reviewed the draft final staff report and its attachments for the basin plan amendment. I noticed and appreciate the several expanded references to additive and/or synergistic effects. I am heartened that the Regional Board has the issue on the radar screen and is planning to evaluate some of the watersheds for a combination of chemicals.

Response to Comment 1: The Regional Board appreciates the comment.

Comment 2: I am a bit disappointed that a monitoring point north of Honcut Creek on the Feather River was not added at this time. I also hope that a watershed/discharger group will examine this area in the future as part of their plan or another source of funding may come available for the work.

Response to Comment 2: Staff has responded to this comment previously (see response to National Marine Fisheries Service Comment 2 contained in Appendix E of the 29 August 2003 Staff Report). Staff believes that greater specificity in terms of monitoring points and methods is more appropriate for any monitoring and reporting requirements associated with implementation of this Basin Plan Amendment. Regional Board staff will keep NOAA Fisheries informed of the development of any such requirements, so that their recommendations can be considered at that time.